

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P400224

Luminaire Tested: **ARCH-L-PA3-250-740-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400224
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-250-740-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24191 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

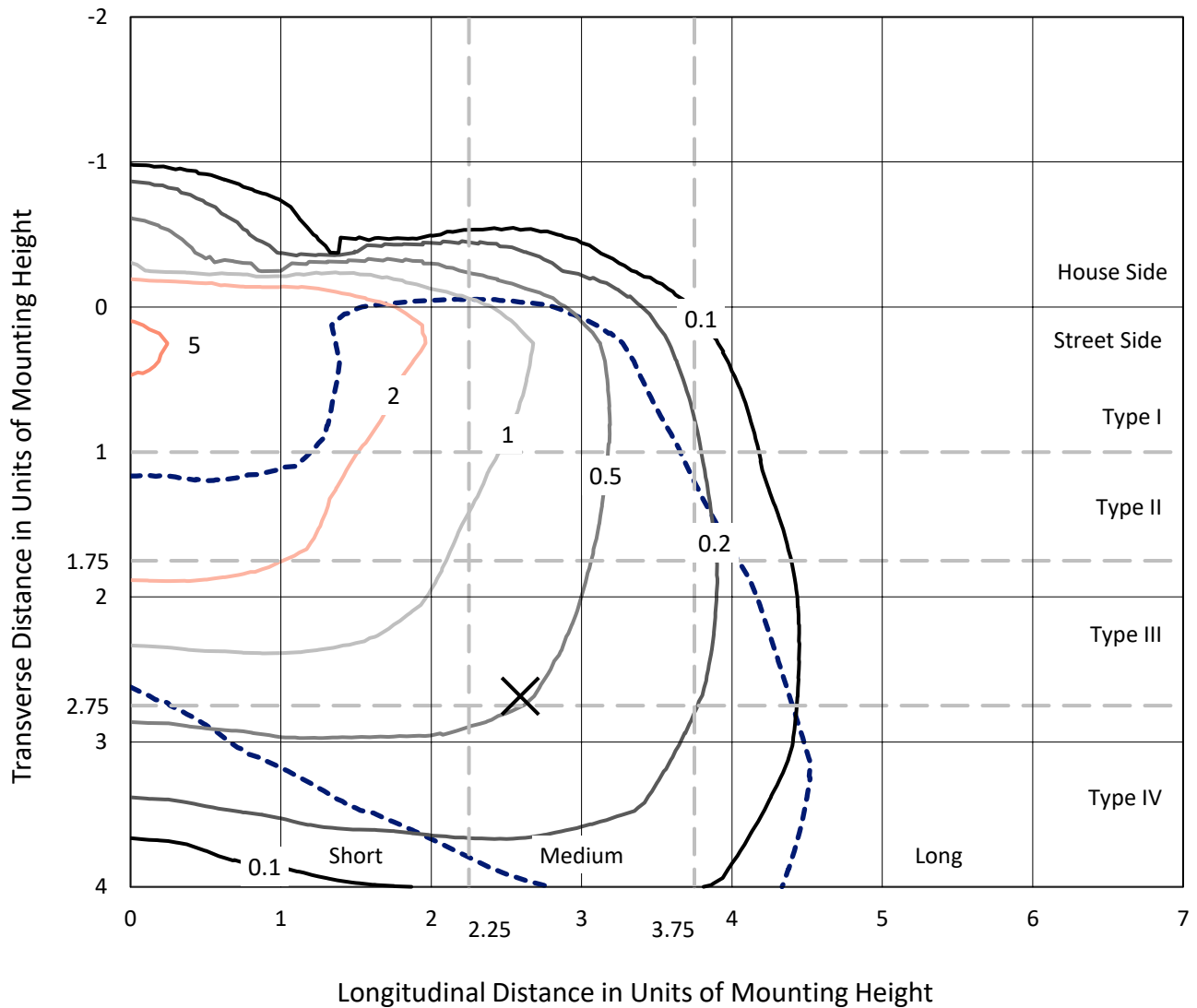
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400224
 CATALOG NUMBER: ARCH-L-PA3-250-740-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

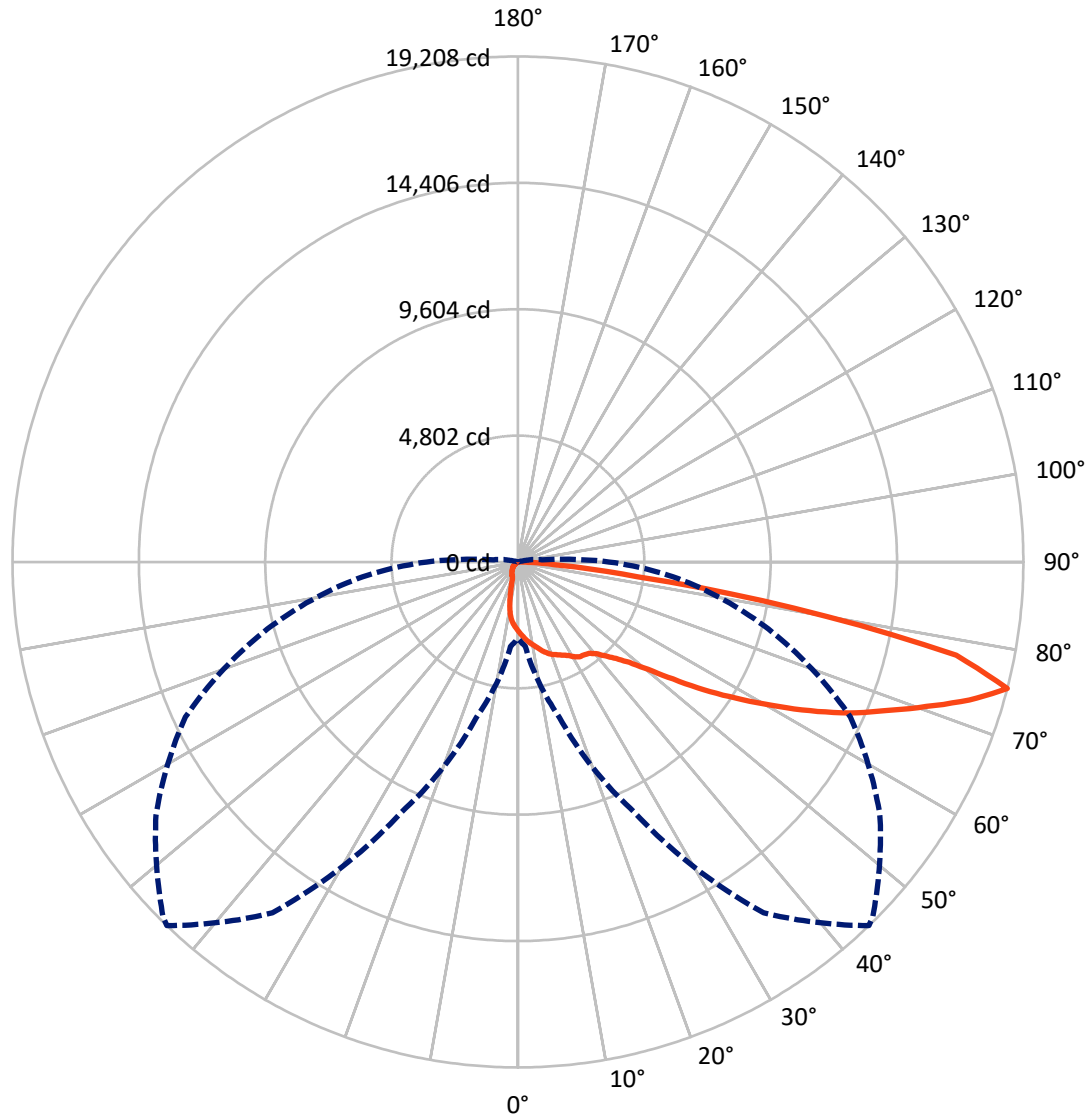
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Medium - N/A

REPORT NUMBER: P400224
CATALOG NUMBER: ARCH-L-PA3-250-740-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P400224

CATALOG NUMBER: ARCH-L-PA3-250-740-U-T4W-HSS

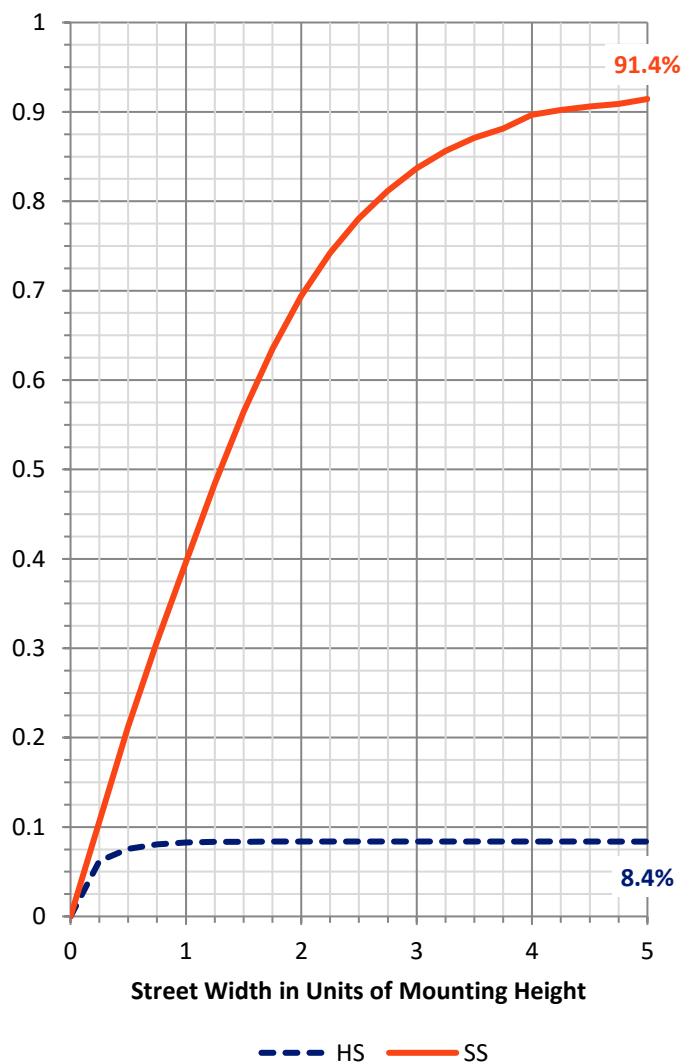
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2040.1	0.0	2040.1
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	22150.9	0.0	22150.9
	% Fixture	91.6	0.0	91.6
Total	Lumens	24191.0	0.0	24191.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.3	1.0
10°-20°	695.8	2.9
20°-30°	1148.3	4.7
30°-40°	1666.6	6.9
40°-50°	2709.2	11.2
50°-60°	4776.1	19.7
60°-70°	6864.2	28.4
70°-80°	5496.7	22.7
80°-90°	585.6	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24191.0	100.0
0°-180°	24191.0	100.0

Coefficient of Utilization



REPORT NUMBER: P400224

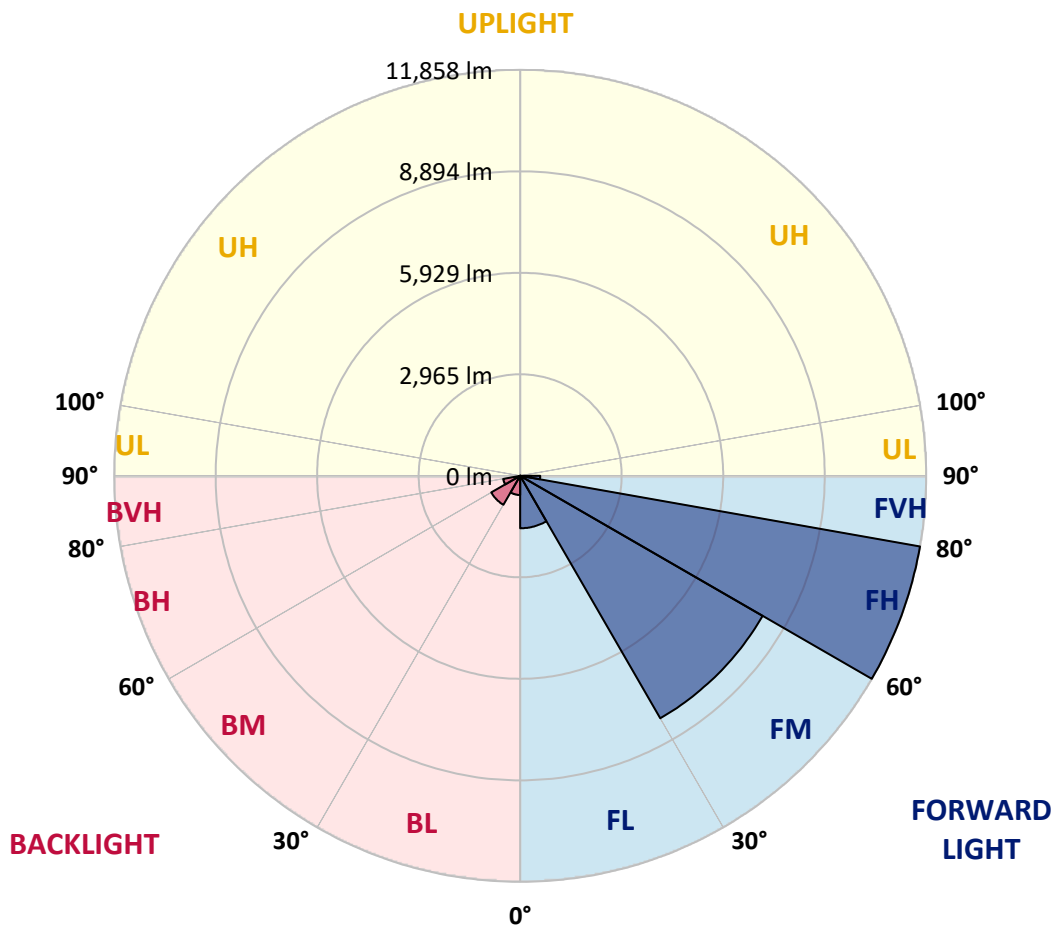
CATALOG NUMBER: ARCH-L-PA3-250-740-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1532.0	6.3			
FM (30°-60°)	8176.8	33.8			
FH (60°-80°)	11858.0	49.0			G4/12000
FVH (80°-90°)	584.2	2.4			G4/750
BL (0°-30°)	560.5	2.3	B2/1000		
BM (30°-60°)	975.2	4.0	B1/1000		
BH (60°-80°)	502.9	2.1	B2/1000		G2/1000
BVH (80°-90°)	1.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Medium





REPORT NUMBER: P400224

CATALOG NUMBER: ARCH-L-PA3-250-740-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1
2.5°	2869.6	2865.2	2851.8	2829.5	2807.2	2784.8	2780.4	2744.7	2704.5	2673.3	2646.5
5°	3124.0	3119.6	3097.2	3048.1	2999.1	2941.0	2936.6	2851.8	2775.9	2691.1	2619.7
7.5°	3387.3	3378.4	3338.2	3262.4	3177.6	3088.3	3079.4	2954.4	2842.9	2731.3	2628.6
10°	3592.6	3583.7	3525.7	3436.4	3320.4	3208.8	3195.4	3066.0	2954.4	2811.6	2673.3
12.5°	3793.4	3775.6	3699.7	3601.5	3458.7	3351.6	3338.2	3204.3	3070.5	2923.2	2753.6
15°	3980.9	3958.6	3887.2	3762.2	3610.5	3507.8	3498.9	3356.1	3217.7	3048.1	2860.7
17.5°	4110.3	4101.4	4016.6	3878.2	3731.0	3646.2	3637.2	3490.0	3351.6	3173.1	2972.3
20°	4177.3	4177.3	4096.9	3945.2	3811.3	3753.3	3739.9	3601.5	3467.7	3298.1	3088.3
22.5°	4190.6	4204.0	4141.6	3976.4	3878.2	3829.2	3820.2	3699.7	3570.3	3414.1	3217.7
25°	4217.4	4217.4	4186.2	4007.7	3936.3	3922.9	3918.4	3811.3	3695.3	3539.1	3347.2
27.5°	4248.7	4248.7	4226.3	4052.3	4025.5	4021.1	4016.6	3967.5	3873.8	3690.8	3498.9
30°	4329.0	4333.5	4315.6	4141.6	4123.7	4172.8	4181.7	4154.9	4038.9	3811.3	3655.1
32.5°	4529.8	4489.7	4440.6	4204.0	4235.3	4297.8	4302.2	4248.7	4123.7	3940.7	3842.5
35°	5034.1	4797.6	4574.5	4257.6	4271.0	4333.5	4342.4	4337.9	4262.0	4105.8	4056.8
37.5°	5502.7	5168.0	4851.1	4382.5	4337.9	4404.9	4422.7	4498.6	4440.6	4333.5	4346.8
40°	5775.0	5645.5	5422.4	4726.2	4471.8	4574.5	4592.3	4708.3	4686.0	4641.4	4726.2
42.5°	6614.0	6622.9	6381.9	5239.4	4717.3	4882.4	4904.7	4998.4	5029.7	5052.0	5257.3
45°	7586.9	7618.1	7560.1	6163.2	5181.4	5235.0	5266.2	5391.2	5507.2	5650.0	6024.9
47.5°	8756.2	8729.4	8515.2	7292.3	5989.2	5690.2	5712.5	5953.5	6154.3	6466.7	7002.3
50°	9791.6	9858.5	9452.4	8345.6	7127.2	6408.7	6386.4	6622.9	6984.4	7421.8	8095.7
52.5°	10835.9	10737.7	10188.8	9389.9	8475.0	7386.1	7319.1	7448.5	7957.3	8475.0	9166.8
55°	11112.6	11121.5	10934.1	10532.4	9599.7	8573.2	8461.6	8452.7	9086.4	9439.0	10291.4
57.5°	11657.0	11679.4	11724.0	11804.3	11362.5	9760.3	9644.3	9519.3	10135.2	10340.5	11420.5
60°	12210.4	12237.2	12509.4	12942.3	12647.8	11041.2	10916.2	10621.7	10965.3	11242.0	12607.6
62.5°	12139.0	12326.5	13116.4	13977.7	13942.0	12447.0	12290.8	11581.2	11799.9	12040.8	13696.6
65°	10960.8	11161.7	12937.9	14263.4	15240.7	13834.9	13580.5	12571.9	12585.3	12875.4	14745.4
67.5°	9907.6	10126.3	11822.2	14142.9	16097.6	15080.1	14816.8	13567.2	13357.4	13839.4	15307.7
70°	9300.6	9519.3	10934.1	13768.0	16338.6	16459.1	16231.5	14705.2	14276.8	14718.6	14678.4
72.5°	7279.0	7622.6	9800.5	13053.9	16597.4	17936.3	17757.8	16146.7	15057.8	13799.2	11175.0
75°	2900.9	3217.7	6118.6	10505.6	16271.7	19208.2	19069.9	16793.8	13937.6	9854.0	5721.4
77.5°	874.7	937.2	1700.4	5194.8	11929.3	17030.3	16985.7	14120.5	9863.0	4574.5	1562.0
80°	290.1	321.3	522.2	1432.6	5444.7	10639.5	10840.3	8997.2	4480.7	1048.8	316.9
82.5°	120.5	133.9	263.3	575.7	1928.0	4583.4	4516.4	4030.0	1562.0	651.6	116.0
85°	31.2	40.2	120.5	330.3	705.1	1579.9	1660.2	1352.3	883.7	540.0	35.7
87.5°	0.0	0.0	58.0	133.9	316.9	477.5	499.8	410.6	499.8	406.1	17.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P400224

CATALOG NUMBER: ARCH-L-PA3-250-740-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1	2633.1
2.5°	2624.2	2601.9	2561.7	2534.9	2499.2	2490.3	2472.4	2450.1	2445.7	2423.3	2427.8
5°	2579.5	2543.8	2472.4	2423.3	2365.3	2347.5	2316.2	2293.9	2276.1	2244.8	2249.3
7.5°	2570.6	2517.1	2418.9	2325.2	2231.4	2164.5	2070.8	1994.9	1932.4	1865.5	1878.9
10°	2601.9	2534.9	2396.6	2267.1	2097.6	1883.3	1637.9	1477.2	1396.9	1316.5	1325.5
12.5°	2664.3	2584.0	2405.5	2209.1	1865.5	1499.5	1160.3	941.7	883.7	847.9	852.4
15°	2758.1	2659.9	2432.3	2097.6	1553.1	1084.5	772.1	678.4	700.7	714.1	714.1
17.5°	2856.2	2744.7	2454.6	1896.7	1200.5	758.7	629.3	620.3	651.6	682.8	682.8
20°	2976.7	2833.9	2459.0	1642.3	865.8	615.9	593.6	593.6	615.9	651.6	651.6
22.5°	3092.8	2932.1	2418.9	1352.3	660.5	571.2	571.2	571.2	584.6	620.3	624.8
25°	3231.1	3052.6	2334.1	1044.3	566.8	544.5	544.5	548.9	557.9	589.1	593.6
27.5°	3378.4	3177.6	2191.3	763.2	517.7	513.2	517.7	522.2	526.6	557.9	566.8
30°	3548.0	3315.9	2008.3	571.2	473.1	473.1	486.5	495.4	495.4	522.2	531.1
32.5°	3744.4	3498.9	1789.6	473.1	428.4	424.0	446.3	459.7	459.7	482.0	490.9
35°	3989.8	3686.3	1526.3	419.5	392.7	383.8	392.7	415.0	424.0	441.8	446.3
37.5°	4315.6	3909.5	1245.1	388.3	366.0	348.1	348.1	352.6	370.4	388.3	392.7
40°	4730.7	4154.9	968.4	366.0	339.2	321.3	307.9	303.5	299.0	312.4	321.3
42.5°	5252.8	4431.6	723.0	343.6	316.9	290.1	272.2	254.4	232.1	227.6	232.1
45°	5922.2	4770.8	535.5	325.8	303.5	263.3	232.1	200.8	160.7	147.3	151.7
47.5°	6712.2	5123.4	419.5	307.9	294.6	232.1	191.9	138.3	98.2	89.3	93.7
50°	7551.2	5462.6	357.0	285.6	276.7	200.8	138.3	84.8	58.0	58.0	62.5
52.5°	8265.3	5654.5	325.8	267.8	249.9	165.1	89.3	49.1	35.7	35.7	40.2
55°	8957.0	5757.1	303.5	249.9	214.2	116.0	49.1	31.2	22.3	22.3	22.3
57.5°	9671.1	5801.7	276.7	227.6	169.6	71.4	26.8	17.9	13.4	13.4	13.4
60°	10304.8	5716.9	236.5	187.4	111.6	35.7	13.4	13.4	8.9	4.5	4.5
62.5°	10835.9	5556.3	165.1	133.9	66.9	17.9	8.9	4.5	0.0	0.0	0.0
65°	11161.7	5297.4	107.1	89.3	40.2	13.4	4.5	0.0	0.0	0.0	0.0
67.5°	11067.9	4811.0	66.9	58.0	17.9	8.9	4.5	0.0	0.0	0.0	0.0
70°	9987.9	3945.2	49.1	35.7	13.4	4.5	0.0	0.0	0.0	0.0	0.0
72.5°	7198.6	2668.8	35.7	22.3	8.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	3463.2	950.6	22.3	17.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	847.9	209.8	13.4	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	187.4	40.2	8.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	62.5	17.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	22.3	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.4	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)